

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): An apparatus for detecting biological information comprising:

a contact member arranged to come into contact with a subject of biological information;
a biological information detecting member provided in the contact member and detects the biological information from the subject; and

an amplifier connected to the biological information detecting member and amplifies a biological signal corresponding to the detected biological information,

wherein a sum of a resistance between the biological information detecting member and the amplifier, and an impedance between the subject in contact with the contact member and the biological information detecting member, is not more than 1/100 of an input impedance in the amplifier; and

wherein the biological information detecting member comprises a material containing at least one of metal oxide, which is transparent and has electrical conductivity, and polymer, which is transparent and has electrical conductivity.

Claim 2 (Original): The apparatus for detecting biological information according to claim 1, wherein a sum of a resistance between the biological information detecting member and the amplifier, and an impedance between the subject in contact with the contact member and the biological information detecting member, is not more than 10 k Ω .

Claim 3 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein a resistance between the biological information detecting member and the amplifier is not more than $1/200$ of an input impedance in the amplifier.

Claim 4 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein a resistance between the biological information detecting member and the amplifier is not more than $5\text{ k}\Omega$.

Claim 5 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein the biological information detecting member comprises a material having a volume resistivity of not more than $25\text{ }\Omega\text{cm}$.

Claim 6 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein the biological information detecting member comprises a material containing at least one of silver, nickel, gold, palladium, carbon, and carbon nanotube.

Claim 7 (Canceled).

Claim 8 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein an impedance between the subject in contact with the contact member and the biological information detecting member is not more than $1/200$ of an input impedance in the amplifier.

Claim 9 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein an impedance between the subject in contact with the contact member and the biological information detecting member is not more than 5 k Ω .

Claim 10 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein an area of the biological information detecting member is set so that an area of contact with the subject is not less than 2 cm² for each place.

Claim 11 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein the contact member comprises a controller used for at least one of an automobile, a ship, and an airplane.

Claim 12 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein the contact member comprises a controller, used for controlling at least one of an automobile, a ship, and an airplane, and an auxiliary contact piece, constituted to assist a subject controlling at least one of the automobile, the ship, and the airplane using the controller when the subject comes into contact with the auxiliary contact piece.

Claim 13 (Original): The apparatus for detecting biological information according to claim 12, wherein in the case in which said apparatus for detecting biological information is provided in the automobile, the auxiliary contact piece is at least one of a side brake piece, an armrest piece, and a shift lever piece.

Claim 14 (Previously Presented): The apparatus for detecting biological information according to claim 12, wherein one of the biological information detecting members provided in the controller, and one of the biological information detecting members provided in the auxiliary contact piece, are connected.

Claim 15 (Previously Presented): The apparatus for detecting biological information according to claim 12, wherein the amplifier amplifies the biological signal detected by one of the biological information detecting member provided in the controller, and the biological information detecting members provided in the auxiliary contact piece, with which the subject is in contact.

Claim 16 (Previously Presented): The apparatus for detecting biological information according to claim 12, wherein in the case in which the amplifier amplifies the biological signals from the biological information detecting member of two lines, the amplifier amplifies the biological signal, which is detected when the subject comes into contact with the biological information detecting member provided in the controller of one of two lines, and the biological signal, which is detected by one of the biological information detecting member provided in the controller of another one line of two lines and the biological information detecting member provided in the auxiliary contact piece of said another one of two lines, with which the subject is in contact.

Claim 17 (Previously Presented): The apparatus for detecting biological information according to claim 1, wherein the biological information detecting member comprises a conductive resin layer provided in the contact member.

Claim 18 (Currently Amended): A contact member included in an apparatus for detecting biological information which comprises: a contact member that is arranged to come into contact with a subject of biological information; a biological information detecting member that is provided in the contact member and detects the biological information from the subject; and an amplifier that is connected to the biological information detecting member and amplifies a biological signal corresponding to the detected biological information, and in which a sum of a resistance between the biological information detecting member and the amplifier, and an impedance between the subject in contact with the contact member and the biological information detecting member, is not more than 1/100 of an input impedance in the amplifier, wherein

a resistance of the biological information detecting member is not more than 5 k Ω ; and
wherein the biological information detecting member comprises a material containing at least one of metal oxide, which is transparent and has electrical conductivity, and polymer, which is transparent and has electrical conductivity.

Claim 19 (Original): The contact member according to claim 18, wherein
the biological information detecting member comprises a material having a volume resistivity of not more than 25 Ω cm.

Claim 20 (Previously Presented): The contact member according to claim 18, wherein the biological information detecting member comprises a material containing at least one of silver, nickel, gold, palladium, carbon, and carbon nanotube.

Claim 21 (Canceled).

Claim 22 (Previously Presented): The contact member according to claim 18, wherein an area of the biological information detecting member is set such that an area of contact with the subject is not less than 2 cm^2 for each place.

Claim 23 (Previously Presented): The contact member according to claim 18, wherein the contact member comprises a controller used for at least one of an automobile, a ship, and an airplane.

Claim 24 (Previously Presented): The contact member according to claim 18, wherein the contact member comprises a controller, which is used for controlling at least one of an automobile, a ship, and an airplane, and an auxiliary contact piece, which is constituted to assist a subject controlling at least one of the automobile, the ship, and the airplane using the controller when the subject comes into contact with the auxiliary contact piece.

Claim 25 (Original): The contact member according to claim 24, wherein in the case in which the contact member is provided in the automobile, the auxiliary contact piece is at least one of a side brake piece, an armrest piece, and a shift lever piece.

Claim 26 (Previously Presented): The contact member according to claim 24, wherein the biological information detecting member provided in the controller and the biological information detecting member provided in the auxiliary contact piece are connected.

Claim 27 (Previously Presented): The contact member according to claim 18, wherein the biological information detecting member comprises a conductive resin layer provided in the contact member.

Claim 28 (Currently Amended): A paint for a biological information detecting member that constitutes a detecting member for detecting biological information from a subject, wherein the paint for a biological information detecting member comprises a conductive material having a volume resistivity of not more than 25 Ω cm, epoxy resin, and a curing agent; and wherein the conductive material comprises at least one of metal oxide, which is transparent and has electrical conductivity, and polymer, which is transparent and has electrical conductivity.

Claim 29 (Original): The paint for a biological information detecting member according to claim 28, wherein the conductive material comprises at least one of silver, nickel, gold, palladium, carbon, and carbon nanotube.

Claim 30 (Canceled).